Assessing Economic Impacts of Recreation Activities at Oregon Coastal and River Ports

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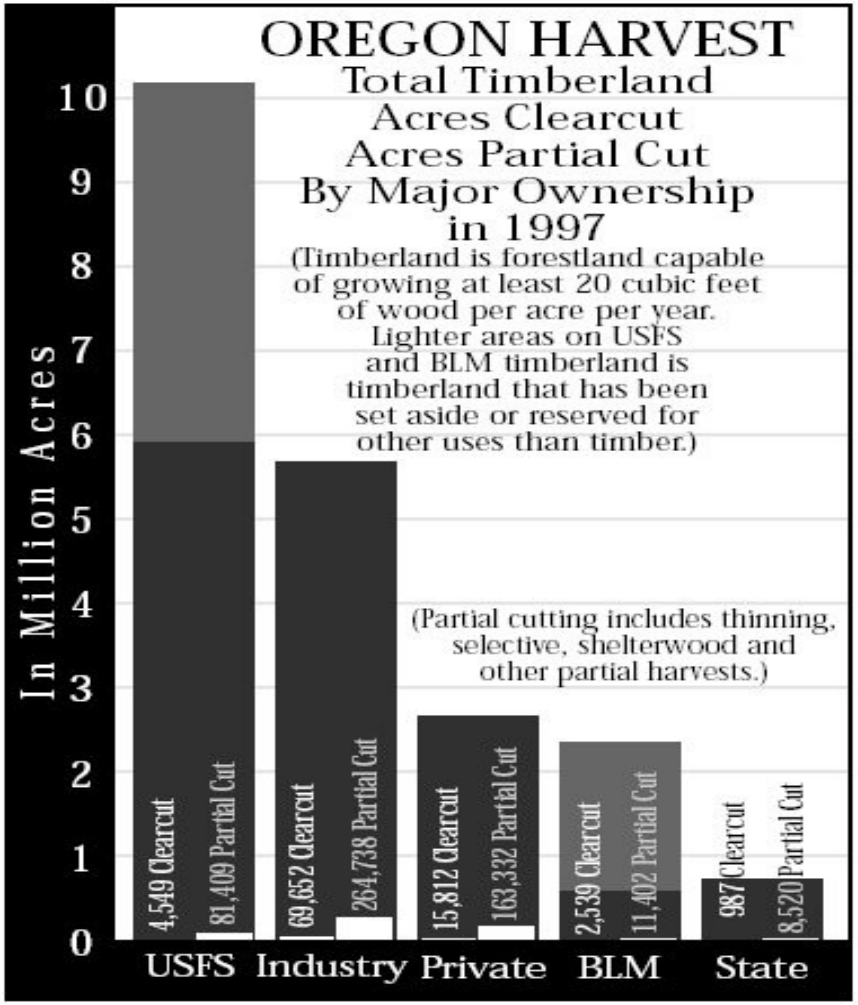
for

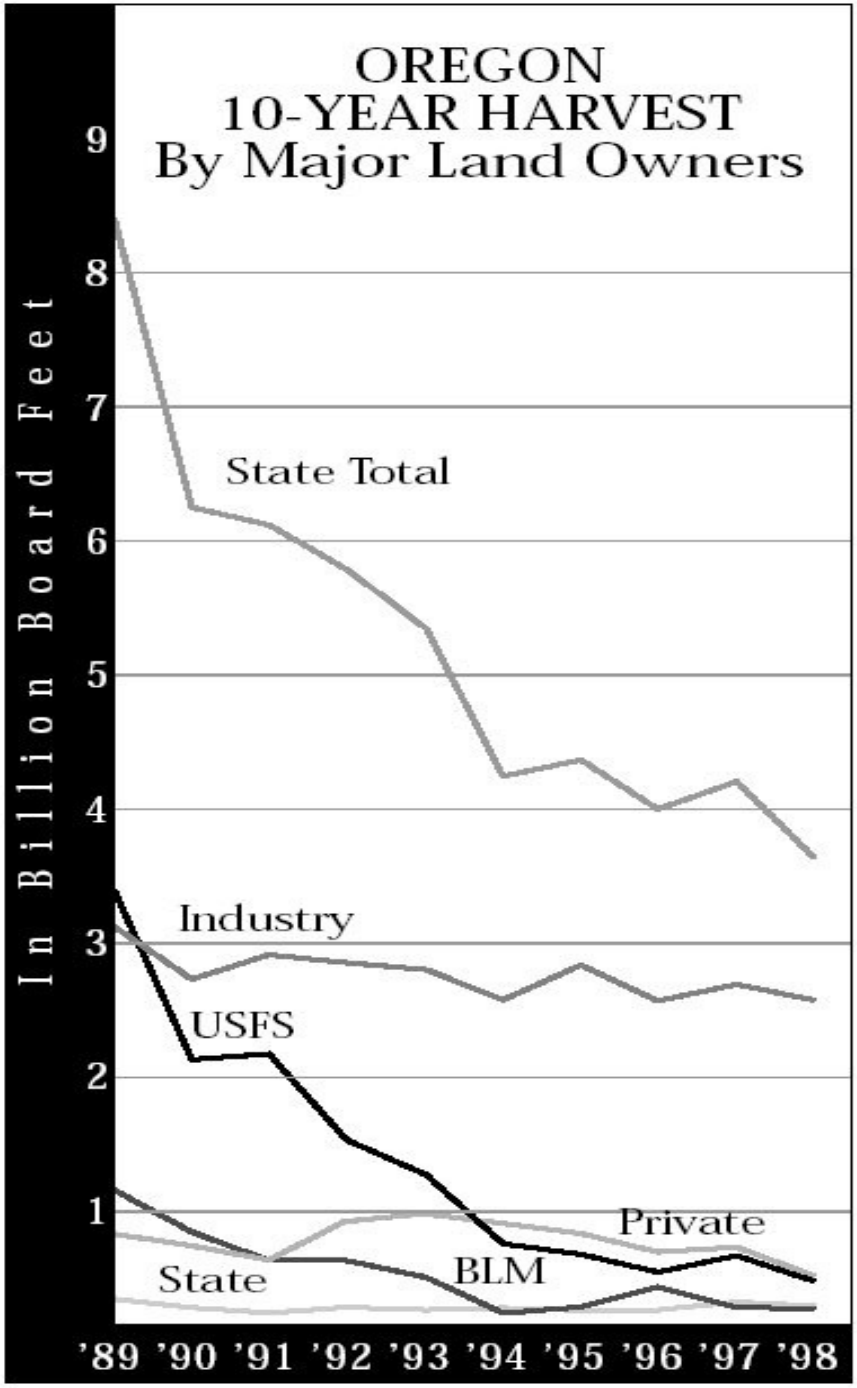
USACE 2004 Economic and Environmental Conference

Oregon Timber Harvest Drops 58% in 10 Years

The U.S. Forest Service, with over 10.2 million acres of timberland, produced the massive dive in harvest. In 1997, the USFS in Oregon harvested on less than 1% of its timberlands: 4,549 acres by clearcut and thinned or partially harvested 81,409 acres.

All information for this Timber Facts was obtained from the Oregon Department of Forestry 1997 Timber Harvest Report and ODOF Web Page: 1998 Timber Harvest Report.





Background

- An overall reduction in shipment of resource-based goods
- Recreational boating and other recreation activities becoming a higher percentage of the economic activity
- The extent of the economic impacts generated by this activity is still unknown– a need for assessment
- Federal funding came from the Planning Assistance to State Program (Section 22 of WRDA).

Partners and Contributors

- USACE Portland District: Federal Funding, Study design, mail back survey implementation
- Oregon Economic and Community Development Department: Study coordination and non-federal funding
- USACE ERDC: Study design, data analysis, report writing
- Oregon State University: On-site survey implementation
- Oregon Ports: Survey information and administration
- Participants of the Quarterly Oregon Ports meetings
- Oregon Port recreation users

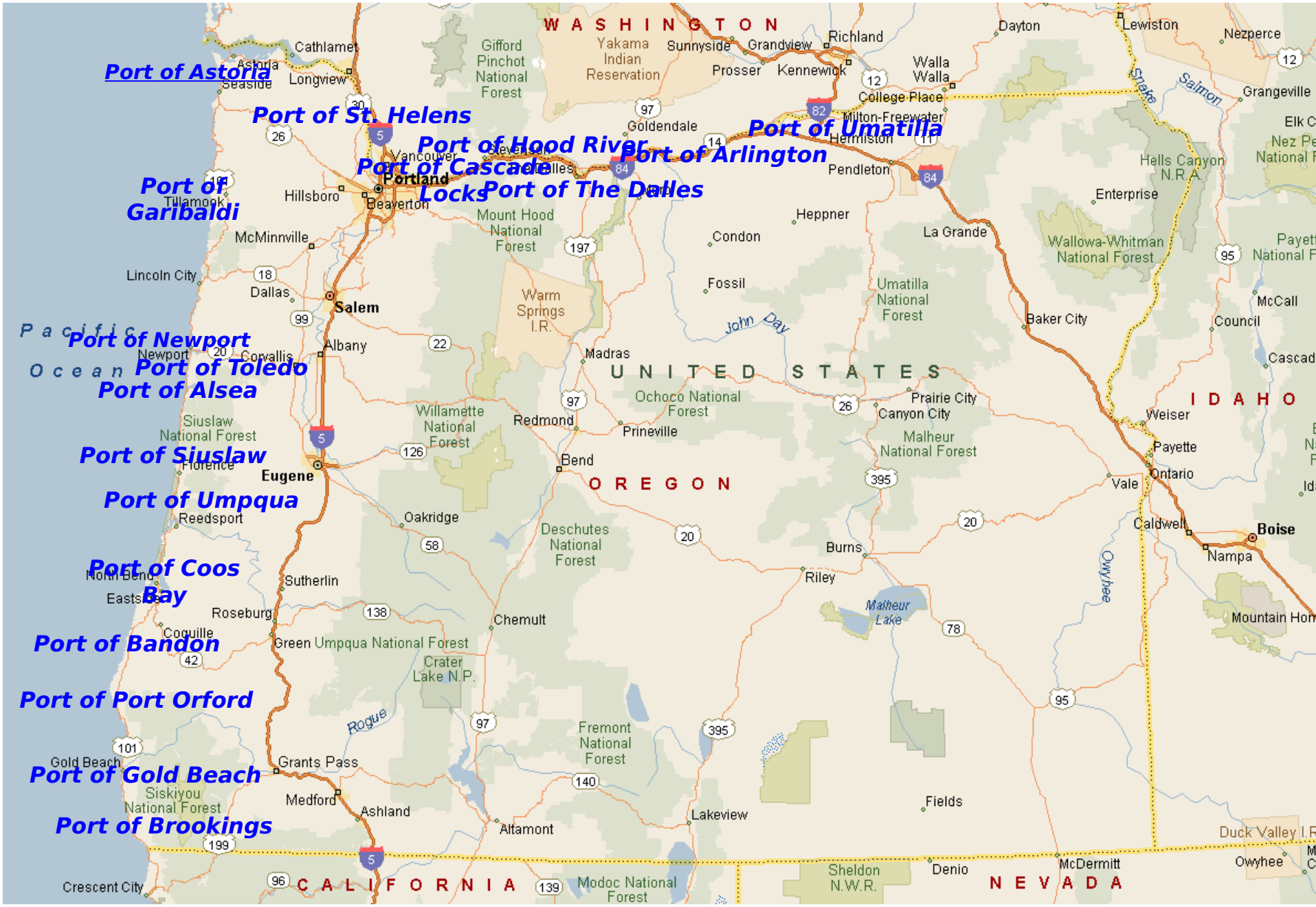
Goal and Objectives

- Characterize the regional economic significance of recreational use of Oregon coastal and river ports

- Estimate total annual recreation use, spending, and economic impacts associated with marina slip renters, boat ramp users, and other visitors to the ports in Oregon

Summary Results

- 735,000 party days a year
- $75 million on trip spending
- $31 million on durable goods by boaters
- Generated $42 million in personal income and supported 1,700 jobs in Oregon


Port of Astoria
Port of St. Helens
Port of Hood River
Port of Cascade Locks
Port of The Dalles
Port of Umatilla
Port of Arlington
Port of Garibaldi
Port of Newport
Port of Toledo
Port of Alsea
Port of Siuslaw
Port of Umpqua
Port of Coos Bay
Port of Bandon
Port of Port Orford
Port of Gold Beach
Port of Brookings
WASHINGTON
OREGON
CALIFORNIA
IDAHO
NEVADA
UNITED STATES
Pacific Ocean
Portland
Salem
Eugene
Bend
Medford
Boise
Nampa
Caldwell
Ontario
Pendleton
Hermiston
Walla Walla
Richland
Kennewick
Yakima
Sunnyside
Grandview
Prosser
Dayton
Lewiston
Clarkston
Grangeville
Enterprise
La Grande
Baker City
Condon
Heppner
Fossil
Madras
Prineville
Redmond
Burns
Riley
Vale
Weiser
Payette
Mountain Home
Cathlamet
Astoria
Seaside
Longview
Vancouver
Hillsboro
Beaverton
Tillamook
McMinnville
Lincoln City
Dallas
Albany
Corvallis
Newport
Florence
Reedsport
Coquille
North Bend
Eastsound
Sutherlin
Roseburg
Oakridge
Chemult
Crater Lake N.P.
Grants Pass
Gold Beach
Crescent City
Ashland
Altamont
Lakeview
Fields
Denio
McDermitt
Owyhee
Gifford Pinchot National Forest
Yakama Indian Reservation
Mount Hood National Forest
Warm Springs I.R.
Siuslaw National Forest
Willamette National Forest
Ochoco National Forest
Deschutes National Forest
Umatilla National Forest
Wallowa-Whitman National Forest
Malheur National Forest
Green Umpqua National Forest
Siskiyou National Forest
Fremont National Forest
Modoc National Forest
Sheldon N.W.R.
Malheur Lake
Hells Canyon N.R.A.
Snake
Salmon
John Day
Rogue
Owyhee
Duck Valley I.R.

Questionnaire

ID#: «PID»

OREGON PORT VISITOR RECREATION EXPENDITURE SURVEY

You can also fill out this survey online at http://corpslakes.usace.army.mil/survey/. Please use your ID number above as your login name for the online survey. Thank you.

PART 1: TRIP SPENDING

Instructions
Please fill in the blanks below for spending on your party's most recent boating trip to the marina at the Port of «Port». The amounts in COLUMN A and B should add up to the total amount of money your party spent for that item.

Example
Let's say the people in your party (in the same boat) spent $52 at hotels within 30 miles of the marina and spent zero on lodging anywhere else. You would enter $52 in COLUMN A and "0" in COLUMN B for this item. In addition, your group spent $60 at restaurants during the trip, of which $22 was spent within 30 miles of the marina, you would enter $22 in COLUMN A and $38 in COLUMN B for this item.

	Within 30 miles (Column A)	Beyond 30 miles (Column B)
1. Hotels, motels, cabins, B&B, rental homes	$ 52	$ 0
2. Restaurants, bars, and other eating and drinking places	$ 22	$ 38

Please enter 0 if you spent nothing; DON'T LEAVE BLANKS!

START HERE (record spending for all people in your party on your most recent trip)

	Spending within 30 miles of the marina (Column A)	Spending beyond 30 miles (Column B)
LODGING		
1. Hotels, motels, cabins, B&B, rental homes	$_____	$_____
2. Campground fees (including hookups)	$_____	$_____
FOOD AND BEVERAGES		
1. Restaurants, bars, and other eating and drinking places	$_____	$_____
2. Groceries, and take out food including alcohol and tobacco	$_____	$_____
TRANSPORTATION		
1. Gas and oil for auto, boat, RV, etc.	$_____	$_____
2. Other auto expenses (rentals, repairs, parking, tolls, etc.)	$_____	$_____
3. Other boat expenses (rentals, repairs, launching fees, etc. *Excluding slippees and equipment*)	$_____	$_____
RECREATION		
1. Attractions, entertainment, and recreation fees	$_____	$_____
2. Sporting goods (*excluding boating equipment*)	$_____	$_____
OTHER EXPENSES (clothing, souvenirs, maps, books, etc.)	$_____	$_____

TOTAL SPENDING: In total, what percent of the trip spending (everything above) was spent in Oregon? _____%

After recording your expenses, please answer these questions.

1. Including yourself, how many people were in your party on this trip? _____Total People
2. In total, how many *nights* did you spend away from home on this trip? _____Nights
3. How many *nights* did you spend within 30 miles of the marina? _____Nights
4. How many *days* did you actually use your boat on that trip? _____Days

(OVER, PLEASE)

Please answer the following questions based on the boat that you used on your most recent trip to the marina.

PART 2: INFORMATION ABOUT BOAT USED ON YOUR LAST TRIP

1. To the nearest dollar, how much did you pay for the boat? $_____ [ ]Check here if it was a gift
2. When you purchased or acquired the boat, was it new or used? [ ]New [ ]Used
3. In what year was the boat purchased or acquired? _____
4. Was the boat purchased or acquired from within 30 miles of the marina where it is currently kept? [ ]Yes [ ]No
5. Was the boat purchased or acquired in Oregon? [ ]Yes [ ]No
6. What was the length of your boat? _____(Feet)
7. How much did you spend in total on boating equipment in the past 12 months? $_____
   - Percent of this spending that was spent within 30 miles of the marina and in Oregon _____%
   - Percent of this spending that was spent beyond 30 miles and in Oregon _____%
   - Percent of this spending that was spent outside of Oregon _____%

   Sum to 100%
8. How much did you spend for slip rentals in the past 12 months? $_____
9. How much did you spend for storage fees that were not included in the slip rental fees in question 8 in the past 12 months? $_____ (Skip to question 10 if there was no spending on additional storage fees)
   - Was the boat stored within 30 miles of the marina? [ ]Yes [ ]No
   - Was the boat stored in Oregon? [ ]Yes [ ]No
10. How much did you spend for insurance on this boat in the past 12 months? $_____

PART 3: YOUR ACCESS TO THE MARINA

1. What is your best estimate of the mileage one-way from your permanent residence to the marina? _____
2. What is the ZIP code of your permanent home? _____
3. Do you have a seasonal residence within 30 miles of the marina? [ ]Yes [ ]No
4. What is the total number of trips made by you or other people using your boat in the past 12 months?
   At this marina _____
   At all other places _____

For more information on this survey or to response the survey online please logon to our website at corpslakes.usace.army.mil/survey. Please use your ID number «PID» as your login name.
Thank you.

Please put this form into the pre-addressed/postage paid envelope and drop it into a mailbox.
Thank you!

Oregon Economic & Community Development Department

US Army Corps of Engineers
Portland District

U.S. Army Corps of Engineers, OMB Control Number: 0710-0001, Expires 02/2003

Survey Procedures

- Mailback surveys were sent out in three waves with two follow-ups
  - Included all annual and seasonal slip renters, while daily and transient slip renters were randomly sampled proportion to marina slip numbers.
- Onsite surveys were conducted at six ports to sample other recreation visitors that cannot be sampled by mailback surveys.

HONDA
Not Potable Water

Survey Summary

- Mail back survey: About 3,000 surveys were mailed out to marina slip renters of the 18 ports, with a response rate of 60%.
- Onsite survey: A total of 3,146 visitors were contacted and 2,327 completed the onsite surveys (75% success rate).

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US Army Corps of Engineers
Recreation Economic Assessment System

Estimating Economic Impacts of Recreation Activities Associated with Oregon Costal and River Ports

Steps to complete an analysis are:

1. Choose or edit a set of visitor spending profiles - SPEND Page
2. Choose or enter visitation data for your port - VISITS Page
3. Choose Multipliers for the study region - MULTIPLIERS Page
4. View and/or Print Results - SUMMARY Page
5. Create charts - PRINT-CHARTS Page

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Based on the MGM2 Model developed by:
Daniel Stynes, Dennis Propst, Wen-Huei Chang and Ya-Yen Sun,
Department of Park, Recreation, and Tourism Resources , Michigan State University

Welcome | SPEND | VISITS | TOTSP | Multipliers | SUMMARY | Print-Charts

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	A	B	C	D	E	F	G	H	I	J	K	L
1	Table 1. Visitor Spending	in Local Area (w/30 miles of the port)					in Party Days	State Average				2002
2							SEGMENT					
3	CATEGORY	Marina/ Day	Marina/ OVN	Boat Ramp/ Day	Boat Ramp/ OVN	Other/ Day	Other/ OVN					
4												
5	Motel, hotel cabin or B&B	0.00	12.76	0.00	13.59	0.00	15.45	0.00	0.00	0.00	0.00	0.00
6	Camping fees	0.00	7.91	0.00	8.84	0.00	7.92	0.00	0.00	0.00	0.00	0.00
7	Restaurants & bars							0.00	0.00	0.00	0.00	0.00
8	Groceries, take-out food/drink							0.00	0.00	0.00	0.00	0.00
9	Gas & oil							0.00	0.00	0.00	0.00	0.00
10	Other auto expenses							0.00	0.00	0.00	0.00	0.00
11	Other boat expenses							0.00	0.00	0.00	0.00	0.00
12	Entertainment and recreation							0.00	0.00	0.00	0.00	0.00
13	Sporting goods							0.00	0.00	0.00	0.00	0.00
14	Souvenirs and other expenses							0.00	0.00	0.00	0.00	0.00
15	Other1							0.00	0.00	0.00	0.00	0.00
16	Other2							0.00	0.00	0.00	0.00	0.00
17	Total							0.00	0.00	0.00	0.00	0.00

Dialog Caption

1994
1995
1996
1997
1998
1999
2000
2001
2002
2003

Choose year and Click OK to adjust spending to a different year

OK

Cancel

Scroll down for options

Note: State averages are applied to estimate port level effects when there was no survey conducted at the port or sample size was too small

A. Generic Spending Profiles

choose one of the following

- (•) State Average Spending
- ( ) High spending (30% higher than average)
- ( ) Low spending (30% lower than average)

Select Low, Typical, or High Spending based on your region's characteristics

B. Import Custom Spending Profiles

- ( ) Import Custom Spending Profile

Percent Adjustment

Click Percent Adjustment to increase/ decr
specific percentage. This adjustment applie

The current percent change 0%

Price Adjust Data

Edit Spending profiles

Save Spending Profiles

Proceed to Visits Page

Fine tuning spending profiles

Welcome | SPEND | VISITS | TOTSP | Multipliers | SUMMARY | Print-Charts

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Table 2. USER INPUTS: Visitation to Your Port

You have selected: **State**

STEP 1: Select a Port or the State to import visitation data

Visitor Pary-Days within 30 miles	Visitor Party-Days for the whole trip
State	Port of Bandon
Port of Alsea	Port of Brookings Harbor
Port of Arlington	Port of Cascade Locks
Port of Astoria	Port of Coos Bay
Port of Bandon	Port of Garibaldi
Port of Brookings Harbor	Port of Gold Beach
Port of Cascade Locks	Port of Hood River
Port of Coos Bay	Port of Newport

Conduct "what if?" analysis here.

Total Party-Days within 30 miles 652,013

Units | Thousands

STEP 2. Edit the distribution of visits by segment (see instructions). Note that default other overnight visit is "0"

◉ Enter as Percentages of Total ○ Enter as number of visits by segment (in person-trips)

Space is provided for up to 12 segments. Click on "Balance Shares" if percents do not sum to 100%.

SEGMENT	SHARE	in Party Days
Marina/ Day	12.5%	81,449
Marina/ OVN	42.9%	279,974
Boat Ramp/ Day	13.8%	89,794
Boat Ramp/ OVN	11.5%	74,906
Other/ Day	11.3%	73,663
Other/ OVN	8.0%	52,227
	0.0%	
	0.0%	
	0.0%	
	0.0%	
	0.0%	
	0.0%	
CHECK SUM	100.0%	652,013

Instructions:

1. Use option buttons in green area to enter visitor types as percentages or absolute number of visits (in boating or party days).

2. If using percents, enter total visits in cell E3 .

3. If visits < million, enter visits in units and choose "Units" button.

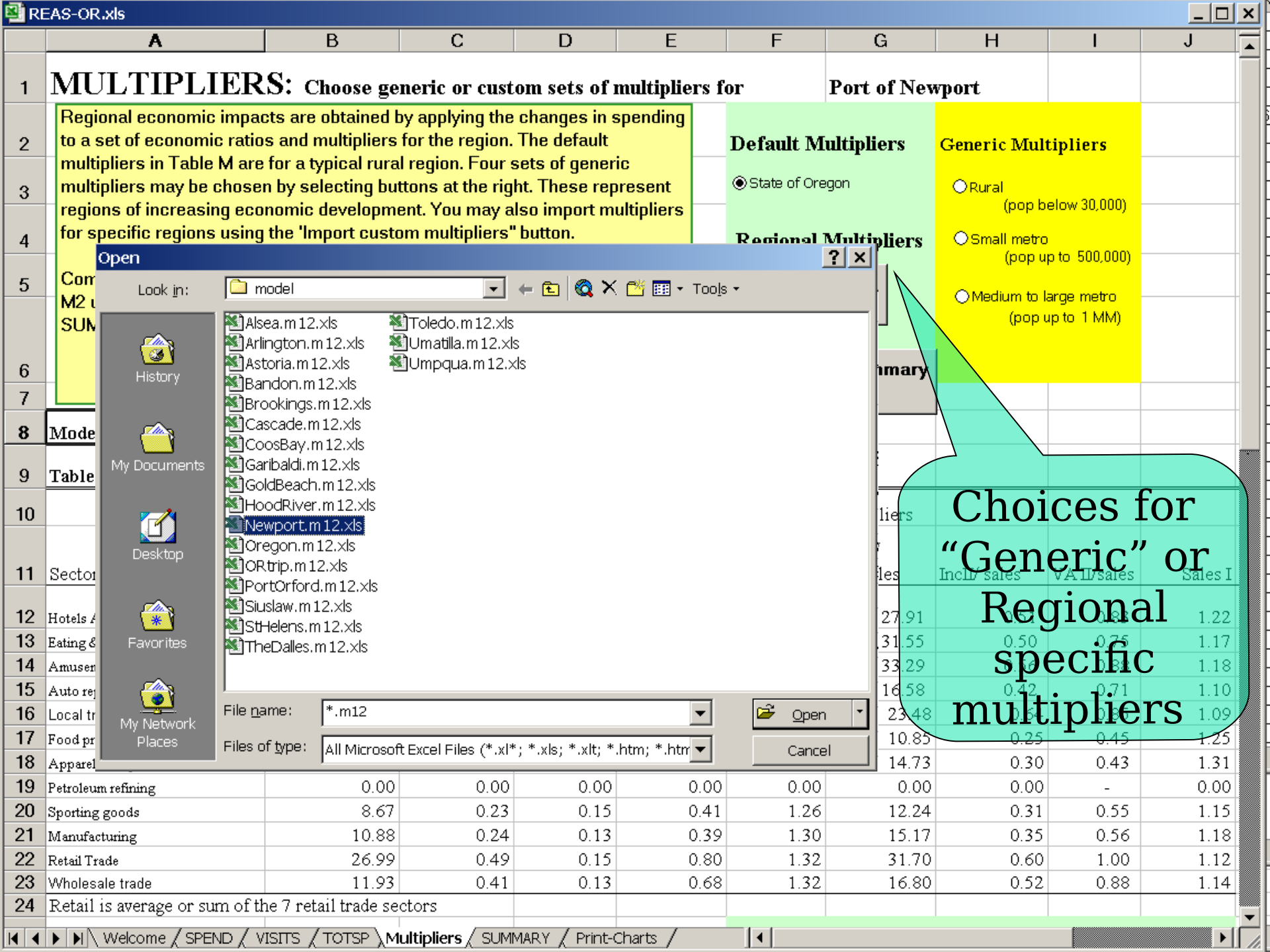
4. Balancing button may be used to recompute totals or force percents to add to 100%.

5. When visits are complete, inspect total spending on TOTSP page and then select Multipliers.

Balance Visitor Segment Shares (without changing total visits)

Balance Visitor Segment Shares (total visits change to reflect increase/decrease)

Welcome | SPEND | VISITS | TOTSP | Multipliers | SUMMARY | Print-Charts



	A	B	C	D	E	F	G	H	I	J
1	MULTIPLIERS: Choose generic or custom sets of multipliers for						Port of Newport			
2	Regional economic impacts are obtained by applying the changes in spending to a set of economic ratios and multipliers for the region. The default multipliers in Table M are for a typical rural region. Four sets of generic multipliers may be chosen by selecting buttons at the right. These represent regions of increasing economic development. You may also import multipliers for specific regions using the 'Import custom multipliers" button.						Default Multipliers	Generic Multipliers		
3							State of Oregon	Rural (pop below 30,000)		
4							Regional Multipliers	Small metro (pop up to 500,000)		
5	Com									
6	M2 u							mary		
7	SUM									
8	Mode									
9	Table									
10								liers		
11	Sector							les	Incld sales	VA Il/sales	Sales I
12	Hotels A							27.91			1.22
13	Eating &							31.55	0.50	0.75	1.17
14	Amusen							33.29			1.18
15	Auto re							16.58	0.42	0.71	1.10
16	Local tr							23.48			1.09
17	Food pr							10.85	0.25	0.45	1.25
18	Apparel							14.73	0.30	0.43	1.31
19	Petroleum refining	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-		0.00
20	Sporting goods	8.67	0.23	0.15	0.41	1.26	12.24	0.31	0.55		1.15
21	Manufacturing	10.88	0.24	0.13	0.39	1.30	15.17	0.35	0.56		1.18
22	Retail Trade	26.99	0.49	0.15	0.80	1.32	31.70	0.60	1.00		1.12
23	Wholesale trade	11.93	0.41	0.13	0.68	1.32	16.80	0.52	0.88		1.14
24	Retail is average or sum of the 7 retail trade sectors										

REAS-OR.xls

SUMMARY OF RESULTS

Update Summary Box

Always click this button to update the text box below

Proceed to Print-Charts Page

Total visitation to the Port of Newport was 64,220 (in Party Days,) in 2002. Visitors in the area spent $6,069 (000's) on trip-related expenditures to the port.

69% of this spending was captured by the local economy, yielding $4,181 (000's) in direct sales to tourism-related firms. These sales generated $1,724 (000's) in direct personal income and supported 93 direct jobs.

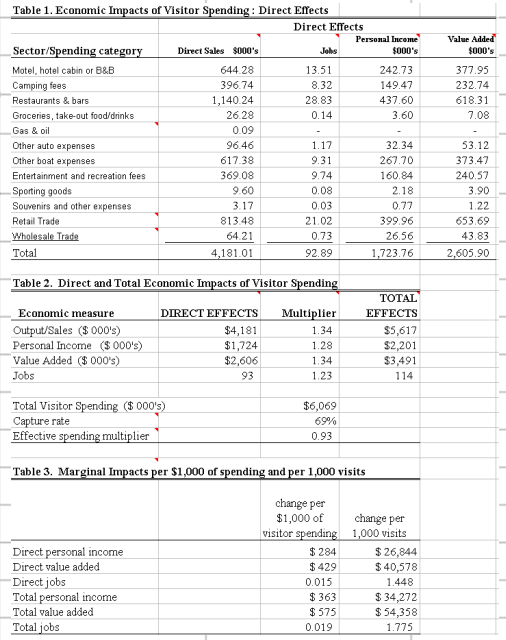
With multiplier effects visitor spending resulted in $5,617 (000's) total sales, $2,201 (000's) in total personal income, and supported 114 jobs.

Fast facts and summary tables

Spending data set	Units	Input
Year of spending data		2002
Multipliers		LincolnCO
VISITS	in Party Days,	64,220
Average spending	per in Party Days	$ 94.50

Table 1. Economic Impacts of Visitor Spending : Direct Effects

	Direct Effects			
Sector/Spending category	**Direct Sales $000's**	**Jobs**	**Personal Income $000's**	**Value Added $000's**
Motel, hotel cabin or B&B	644.28	13.51	242.73	377.95
Camping fees	396.74	8.32	149.47	232.74
Restaurants & bars	1,140.24	28.83	437.60	618.31
Groceries, take-out food/drinks	26.28	0.14	3.60	7.08
Gas & oil	0.09	-	-	-
Other auto expenses	96.46	1.17	32.34	53.12
Other boat expenses	617.38	9.31	267.70	373.47
Entertainment and recreation fees	369.08	9.74	160.84	240.57
Sporting goods	9.60	0.08	2.18	3.90
Souvenirs and other expenses	3.17	0.03	0.77	1.22
Retail Trade	813.48	21.02	399.96	653.69
Wholesale Trade	64.21	0.73	26.56	43.83



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Total	4,181.01	92.89	1,723.76	2,605.90

Table 2. Direct and Total Economic Impacts of Visitor Spending

Economic measure	DIRECT EFFECTS	Multiplier	TOTAL EFFECTS
Output/Sales ($ 000's)	$4,181	1.34	$5,617
Personal Income ($ 000's)	$1,724	1.28	$2,201
Value Added ($ 000's)	$2,606	1.34	$3,491
Jobs	93	1.23	114
Total Visitor Spending ($ 000's)		$6,069	
Capture rate		69%	
Effective spending multiplier		0.93	

Table 3. Marginal Impacts per $1,000 of spending and per 1,000 visits

	change per $1,000 of visitor spending	change per 1,000 visits
Direct personal income	$ 284	$ 26,844
Direct value added	$ 429	$ 40,578
Direct jobs	0.015	1.448
Total personal income	$ 363	$ 34,272
Total value added	$ 575	$ 54,358
Total jobs	0.019	1.775

Welcome | SPEND | VISITS | TOTSP | Multipliers | SUMMARY | Print-Charts

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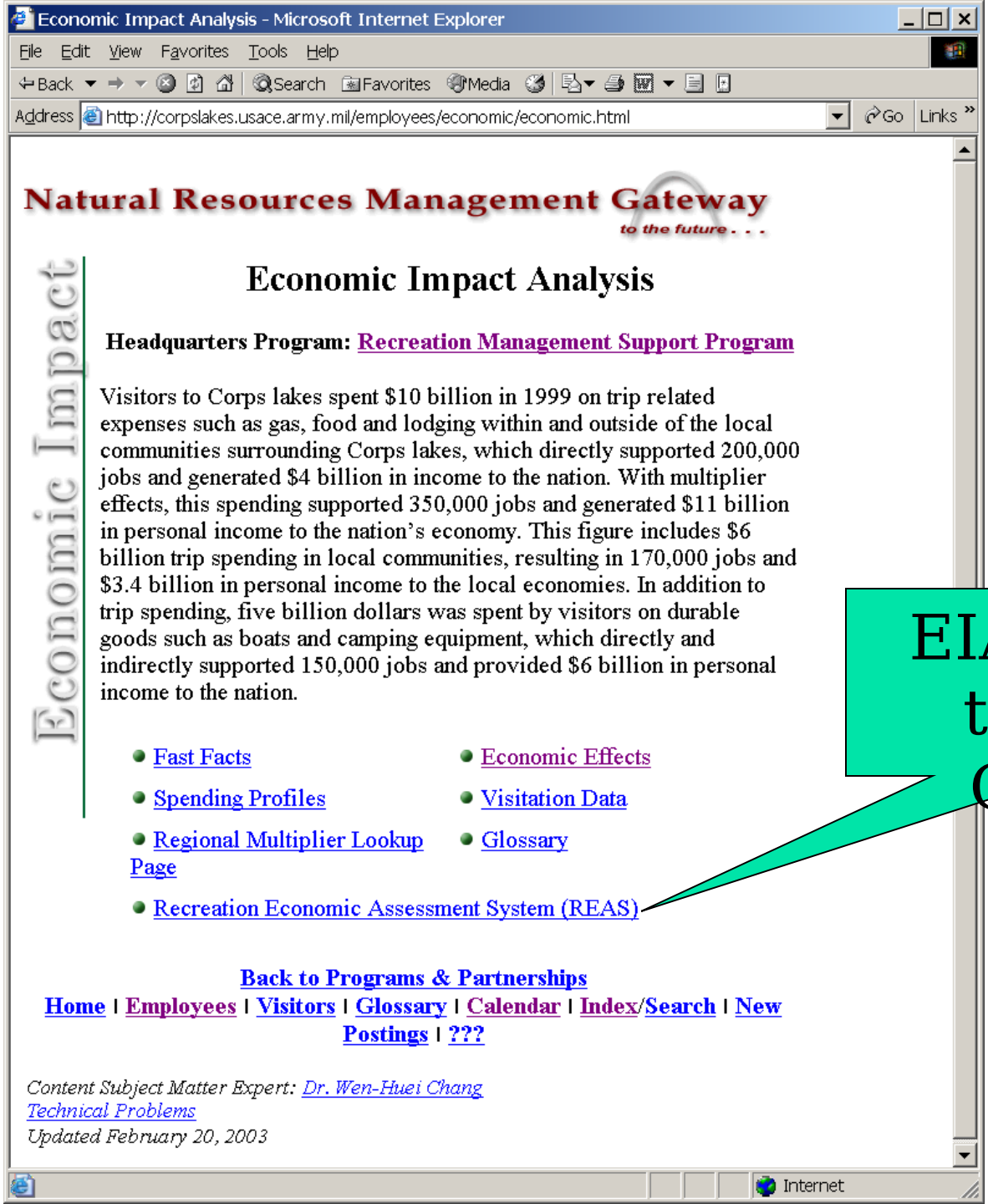
Conclusions and Applications

- Importance of the ports to the local, regional and state economy
- Need for continued operation and maintenance of general navigation and moorage facilities--Obtain state and Federal assistance
- Process of assessing economic impacts can be applied to other navigation projects
- Starts to document navigation and other business areas' contribution to recreation benefits
- Results can be tailored to local conditions for "what if" analysis


Economic Impact Analysis - Microsoft Internet Explorer
File Edit View Favorites Tools Help
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Address http://corpslakes.usace.army.mil/employees/economic/economic.html
Go Links
Natural Resources Management Gateway
to the future . . .
Economic Impact
Economic Impact Analysis
Headquarters Program: Recreation Management Support Program
Visitors to Corps lakes spent $10 billion in 1999 on trip related expenses such as gas, food and lodging within and outside of the local communities surrounding Corps lakes, which directly supported 200,000 jobs and generated $4 billion in income to the nation. With multiplier effects, this spending supported 350,000 jobs and generated $11 billion in personal income to the nation's economy. This figure includes $6 billion trip spending in local communities, resulting in 170,000 jobs and $3.4 billion in personal income to the local economies. In addition to trip spending, five billion dollars was spent by visitors on durable goods such as boats and camping equipment, which directly and indirectly supported 150,000 jobs and provided $6 billion in personal income to the nation.
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